

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Kröger et al.

Application No.: 10/525907

Confirmation No.: 5445

Filed: February 25, 2005

Art Unit: 1652

For: METHOD FOR THE PRODUCTION BY
FERMENTATION OF SULPHUR-
CONTAINING FINE CHEMICALS (METF)

Examiner: Chowdhury, I. H.

RESPONSE TO RESTRICTION REQUIREMENT

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the restriction requirement set forth in the Office Action mailed March 24, 2006, Applicants respectfully traverse and strongly urge reconsideration of the restriction requirement for the following reasons.

Restriction Between Groups I and II is Not Proper.

The Examiner argues that the methods of Groups I and II do not share a “special technical feature” which defines a contribution over the prior art. In supporting this proposition, the Examiner states that the only shared technical feature between Groups I and II is that they both relate to a polynucleotide encoding a methylenetetrahydrofolate reductase (metF) polypeptide. The Examiner further argues that a DNA encoding such a polypeptide is known in the art, citing PCT publication WO 02/10206 to Bathe et al. Applicants respectfully disagree with the Examiner’s conclusions.

As stated in the specification and repeated in the claims, the present invention relates to a method for fermentative production of sulfur-containing fine chemicals by culturing and fermenting an L-methionine-producing microorganism. Applicants respectfully submit that the Examiner has not made a prima facie case that this is not a special technical feature entitling Applicants to consideration of all their claims together. The Examiner has asserted that the metF

is the common technical feature and that sequences for metF are not novel. However, the special technical feature is not the metF gene but rather the method of producing sulfur-containing fine chemicals through fermenting an L-methionine-producing microorganism. The Patent Office has not shown why this common feature does not suffice for consideration of all the claims together.

Admittedly, the methods of Group I and II differ in the preambles for the product produced. However, the recited products are very closely connected. Group I claims include claims to producing a "sulfur-containing fine chemical," which is defined in the specification to include any chemical compound which contains at least one covalently bound sulfur atom and is accessible by a fermentation method of the invention. (Specification at page 7, lines 4-7). Group II recites production of an L-methionine-containing animal feed additive, which is a composition of a species of the sulfur-containing fine chemicals of Group I. Thus, the claims of Groups I and II share a special technical feature and consideration of them together is respectfully requested.

In the alternative, grouping of claim 16 with Group I rather than Group II is respectfully requested. Claim 16, like the claims of Group I, requires coryneform bacteria expressing a nucleotide encoding a protein with metF activity. Thus, inclusion of claim 16 into Group I is requested, as it shares an additional special technical feature with the claims of Group I.

For these reasons, reconsideration and withdrawal of the restriction is requested.

As required by the Examiner, Applicants provisionally elect Group I, claims 1-14 with traverse, should the Examiner determine to retain the restriction requirement.

Restriction To Only Claims Reciting One Protein Sequence Is Inappropriate.

The Examiner has further required Applicants to select one protein or one nucleotide sequence encoding one amino acid sequence. Applicants strongly disagree with this requirement and request reconsideration and withdrawal for the following reasons.

Applicants' claims of Group I are directed to a method for fermentative production of at least one sulfur-containing fine chemical requiring expression of at least one heterologous nucleotide sequence encoding a protein with metF activity in a coryneform bacteria. The proteins of Groups (A) to (AA) are all examples of metF proteins that can be expressed as the heterologous protein in the methods of the claims of Group I. Applicants are not claiming the

proteins as novel proteins requiring analysis and searching of their sequences and structure. Instead, Applicants are claiming methods for fermentive production using a heterologous metF nucleotide expressed in coryneform bacteria. Thus, searching of the individual metF polypeptides is not believed to be required. The recited sequences are simply representative sequences with the same function that can be used in the methods of the present invention. The Examiner asserts that the claims recite multiple products and/or methods in violation of 37 CFR 1.475. Applicants respectfully disagree. All the claims of Group I pertain to methods involving expression of heterologous metF polynucleotides in coryneform bacteria. Thus, the claims relate to one method and one invention and, therefore, the requirements of 37 CFR 1.475 are met.

Furthermore, to limit the present application to claims directed to use of only one protein or nucleic acid encoding the protein would unduly restrict the application to one very narrow invention and require an undue multiplicity of applications to be filed to cover use of other proteins.

Furthermore, the International Examination Authority, as shown in the International Preliminary Examination Report, has not found a lack of unity of invention for the sequences when applying PCT Rules 13.1 and 13.2.

Should the Examiner disagree, Applicants hereby provisionally elect the first listed pairing: (A) the protein of SEQ ID NO: 2 or a nucleic acid encoding SEQ ID NO: 2 with traverse.

Election of Species

The Examiner has further required the Applicants to elect one species to which the claims shall be restricted if no generic claim is found allowable. The Examiner requests election of a single gene as recited in claim 12 or a single gene as recited in claim 13. Applicants respectfully disagree. It is urged that the application can be searched and examined without undue burden should all of the genes of dependent claims 12 and 13 be considered.

Nevertheless, as required by the Examiner, Applicants hereby provisionally elect the gene lysC of claim 12 (with traverse). Claim 12 is readable on this species.

Conclusion

For the above reasons, Applicants respectfully request that the restriction requirement be reconsidered and withdrawn.

This response is filed within one month of the mailing of the Office Communication. Thus, Applicants believe that no fee is due with this response. However, if any additional fee is due, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 03-2775, under Order No. 13111-00005-US from which the undersigned is authorized to draw.

Respectfully submitted,

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